

Fuel Injection Pump Tester

Item 92699

INSTRUCTIONS AND PRECAUTIONS

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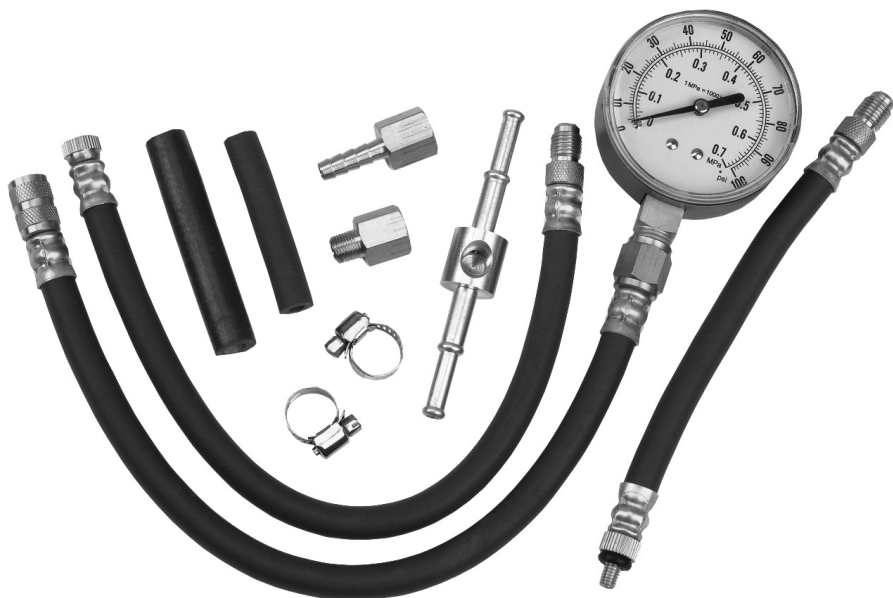
⚠ WARNING

Read this material before
using this product.
Failure to do so can result
in serious injury.
SAVE THIS MANUAL.

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-800-444-3353 as soon as possible.

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For technical questions or replacement parts, please call 1-800-444-3353.



Specifications

Compatibility	For most fuel injection systems except: Bosch® CIS Jetronic® Throttle Body Systems on GM® vehicles
Pressure Gauge	0~100 PSI, 0~7 Bar, 1/4" - 18 NPT Swivel

IMPORTANT SAFETY INFORMATION

The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

1. Do not use on diesel engines.
2. Stop engine, loosen gas cap and relieve fuel pump pressure (see service manual) before opening fuel line. Do not change fittings with engine running.
3. Before testing fuel system, verify all connections are tight to eliminate leaking.
4. **Gasoline is highly flammable.** Do not smoke, or test near open flames or a source of electrical sparks. Do not allow gasoline to come in contact with the hot manifolds or other engine components. If additional lighting is required, use only explosion proof drop-light.
5. Do not drive the vehicle while under test.
6. Before testing, review and follow instructions from the vehicle manufacturer's service manual.
7. After testing, turn engine off and depressurize system before removing test components. Place absorbing cloths around fittings before disconnecting. Wipe up any spilled fuel immediately. Place cloths in a fireproof container.
8. Clean all testing components of residual fuel before storing.
9. Wear ANSI-approved safety goggles and heavy-duty work gloves during setup and use.
10. This product is not a toy. Do not allow children to play with or near this item.
11. Use as intended only.
12. Inspect before every use; do not use if parts are loose or damaged.
13. Perform service in a well-ventilated, outdoor location. Not only are gasoline fumes flammable, but carbon monoxide is produced by a running engine. This is a deadly gas that you cannot see or smell.
14. **WARNING!** The brass components of this product contain lead, a chemical known to the State of California to cause birth defects (or other reproductive harm). (California Health & Safety Code 25249.5 *et seq.*)
15. Maintain product labels and nameplates. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.

Operating Instructions



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this document including all text under subheadings therein before set up or use of this product.

1. **WARNING!** Before making connections and testing, place a dry chemical (Class B) fire extinguisher nearby.

NOTE: Pressure Gauge connections are made either directly to the pump, or in-line between the pump and engine.

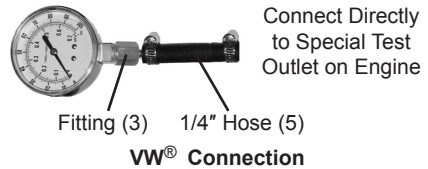
2. Relieve fuel line pressure from vehicle fuel system. Refer to vehicle manufacturer's service manual for instructions on relieving pressure from fuel line, testing procedures and connection points, and normal pressure readings.
3. Use various fittings and hoses to connect Pressure Gauge (1) directly to fuel pump; as in the case of VW®, or in-line between the fuel pump and engine for most other vehicles. See connection examples that follow.



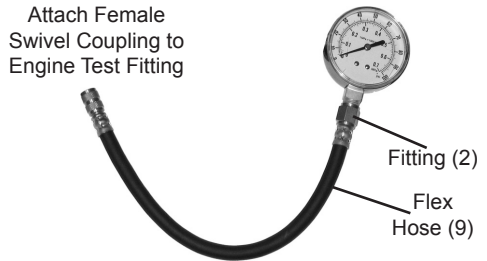
Typical 1/4" Connection



Typical 3/8" Connection



VW® Connection



Cadillac® - Bendix® Connection

4. Use small amount of pipe compound or PTFE thread seal tape on connection threads to prevent leaks. Tighten using wrench (not supplied).

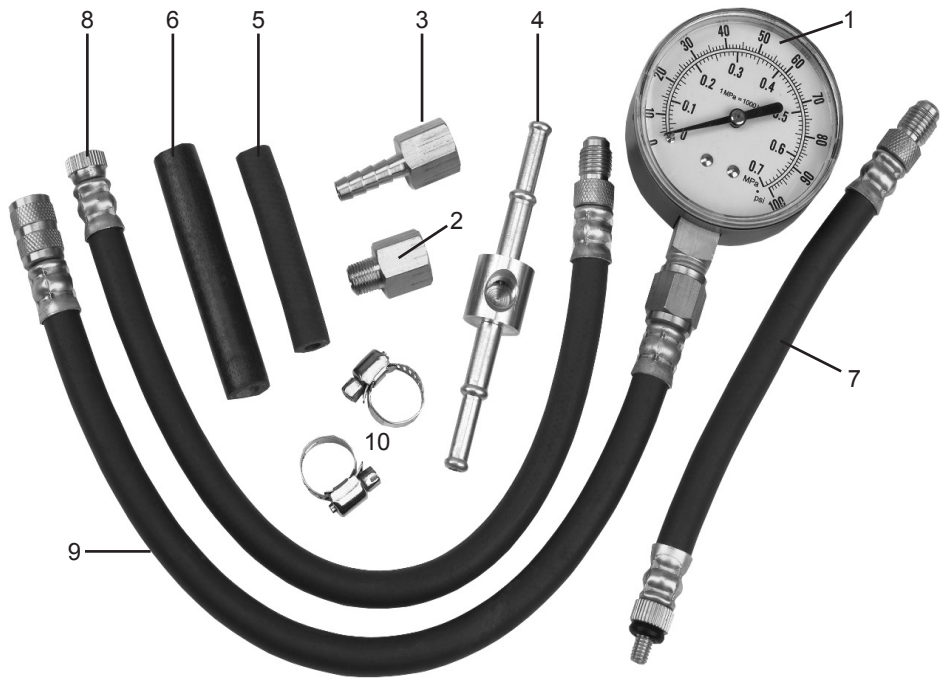
CAUTION! Make sure all connections are tight to avoid fuel leaks.

5. Start engine and immediately check for fuel leaks. If fuel leaks are found, turn engine off and fix leaks.
6. Read pressure off Pressure Gauge.
7. Turn off engine and remove keys from ignition.
8. Wrap cloth around hose connection point before relieving pressure from fuel line and removing testing components.
9. Reconnect vehicle's fuel injection line.
10. Wipe up any spilled fuel. Dispose of fuel-soaked rags in a fireproof container.
11. Start engine and check for leaks. Fix leaks if found.
12. Clean and store Fuel Injection Test Kit components and place in plastic kit bag.

Parts List and Diagram

Part	Description	Qty
1	Pressure Gauge	1
2	Brass Fitting (1/8" - 27 NPT x 1/4" - 18 NPT)	1
3	Brass Fitting (1/4" Barbed x 1/4" - 18 NPT)	1
4	Aluminum Fitting (1/4" & 3/8" Barbed x 1/8" - 24 NPT)	1

Part	Description	Qty
5	Rubber Hose (1/4" x 2.5" L)	1
6	Rubber Hose (3/8" x 3" L)	1
7	Short Flex Hose	1
8	Medium Flex Hose	1
9	Long Flex Hose	1
10	Hose Clamp	2



Record Product's Serial Number Here: _____

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

Fuel Pump Pressure Examples

Note: Read the vehicle's service manual to determine the actual Fuel Pump pressure. The chart below is only provides a general frame of reference for pump pressure.

U.S. Built Vehicles	Pump Pressure (PSI)
Cadillac® - EFI	37.5 – 41
Cadillac® - DEFI	9 – 12
Imperial®	8
Lincoln® & Versailles®	30 – 40

Foreign Built Vehicles	Pump Pressure (PSI)
Alfa Romeo®	16 – 18
Alliance® (49 states) Bendix® Type	28 – 36
Alliance® (California only) L-Jetronic®	36
Audi-Fox®	66.8 – 75.3
BMW®	21.7 – 40
Datsun®	28 – 43
Fiat®	28 – 30
Jaguar®	28 – 30
Mercedes Benz®	29 – 30
Porsche®	28.4
Renault® 17TS	35
Saab®	27
Volkswagen®	28
Volvo®	28

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To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

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